

**Remarks**

In the Office Action dated October 15, 2003, claims 20-23 and 30, in the above-identified U.S. patent application were rejected. Reconsideration of the rejections is respectfully requested in view of the above amendments and the following remarks. Claims 1-19 have been canceled, new claims 33-35 have been added and claims 24-29 and 31-32 have been withdrawn.

The office action indicates that a new title is required. A more descriptive title is inserted by this amendment.

The office action indicates that a revised abstract is required. A revised abstract is attached to this amendment on a separate sheet.

Claims 20-23 and 30 were rejected under 35 USC §112, first paragraph, as lacking an adequate written description. The claims have been amended to clarify that the antibodies bind to a part of the recited protein. In view of these amendments applicants request that this rejection be withdrawn.

Claims 20-23 and 30 were rejected under 35 USC §112, first paragraph as lacking enablement. The above discussed amendments clarify that additional amino acids may be included in the protein but the antibody binds to the part of the protein defined in the claims. Thus, the antibody does not bind to a "FLAG epitope, polyhistidine tail or "Protein A" fragment. In view of the above amendments, applicants request that this rejection be withdrawn.

Claims 20-21 and 30 were rejected under 35 USC §112, first paragraph, as lacking enablement for the mature protein encoded by the nucleotide sequence of SEQ ID NO:1. Applicants respectfully point out that page 4 of the application indicates that SEQ ID NO:3 is the amino acid sequence deduced from SEQ ID NO:1. In addition, the amended claims recite language similar to the language in U.S. Patent No. 6,120,760 claim 1 (a)-(c), which is directed to an isolated protein. U.S. Patent No. 6,120,760 is the parent of the present application. In view of these amendments, applicants request that this rejection be withdrawn.

Claims 20-23 and 30 were rejected under 35 USC §112, second paragraph, regarding the language "essentially the same...activities". Applicants respectfully point out that this language was not found indefinite in the parent application and thus should not be found indefinite in the present claims. New claim 34 indicates that the protein retains the cartilage or bone inducing activities of the protein encoded by the nucleotide sequence of SEQ ID NO:1.

Claims 20-23 were rejected under 35 USC §102(b) as anticipated by Hopp. Applicants point out that the sequence disclosed in Hopp is not included in SEQ ID NO:3 or encoded by SEQ ID NO:1. Therefore Hopp clearly does not anticipate the present claims and applicants request that this rejection be withdrawn.

Claim 30 was rejected under 35 USC §103(a) as unpatentable over Hopp in view of the Stratagene catalog. As discussed above, the sequence disclosed in Hopp is not included in SEQ ID NO:3 or encoded by SEQ ID NO:1. The Stratagene catalog

discloses kits but does not does not cure the deficiencies in Hopp. In view of this, applicants request that this rejection be withdrawn.

Applicants respectfully submit that all of claims 20-23, 30 and 33-35 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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